Thor Heyerdahl, *Early Man and the Ocean*. 438 pp., bibliography, index, several unnumbered figures. New York: Doubleday, 1979. Pp. 438, illustrations, maps, bibliography, index. \$12.95.

Whatever one might think of the varied interpretations of the human past set forth in this book, the author surely has a deserved place as one of the great "inspirational priests" of mid-twentieth century prehistoric studies. His navigational experiments have achieved worldwide fame, and his writings display the kind of emotion which serves to sway countless readers. I know from my own experience that the average nonprehistorian, should he take an interest in such matters, will, if asked, volunteer the view that the Polynesians migrated from the Americas. If he reads this book, he may well also volunteer the view that the Olmecs migrated from the Mediterranean.

The book contains fourteen previously published papers from Heyerdahl's fairly long career, each separately updated by an introduction. Many have been reprinted before; and as far as the Pacific is concerned, his views have changed little in the past twenty years. Heyerdahl's approach is to polarize entities in an all-or-nothing fashion, a goal which all politicians must strive for, but which is far outside the theoretical stream of modern prehistory. For instance, isolationists are ranged against diffusionists, "culture bearers" against "primitives," and Heyerdahl's choice to explain all civilization centers on the diffusion of "high culture" on the currents of the Atlantic and Pacific Oceans. As far as the Americas and the Pacific Islands are concerned, there is only one source of "high culture" (a term which Heyerdahl seems unwilling to define), and this lies in the Mediterranean. He does not really address himself to the Indian and Chinese spheres, but reveals enough to make it clear that he believes the same may well apply.

During reading, the precise theme of the book takes a long time to appear, mainly because many arguments are repeated in different chapters from different viewpoints, and the contexts seem to hop rather randomly from one part of the earth to another. Instead of merely lumping together a group of somewhat disparate articles, Heyerdahl might have done better simply to write another book, setting out the whole story from start to finish in one go.

The chapters are an unusual mixture of worthy and scholarly observations, and factually outdated diffusionist dogma. Falling mainly in the worthy and scholarly class, and presenting arguments which I find quite acceptable (perhaps because the subjects are outside my own field of specialization) are Chapters 1, 5, 8, 10 and 11. In these, Heyerdahl presents

the views that the first ocean-going planked ships developed from reed boats in the Mediterranean region, that Columbus knew of the earlier discovery of America by the Vikings, and that the Galapagos Islands were reached by South American balsa rafts in prehistoric times. He also gives an excellent account of balsa raft navigation by using centerboards, and discusses the reports of coconuts growing on Cocos Island in the seventeenth century. So far, so good, and all pleasant, informative reading.

The problems, of course, arise with the remaining chapters, and Ι know that I am not the first to criticize Heyerdahl for some of his views. He kicks off in Chapter 2 by describing the great current systems which flow from east to west across the Atlantic and Pacific Oceans, and suggests that if the Spaniards were obliged to use them to make their voyages, then so were all other prehistoric ocean travellers. He uses the results of the Levison, Ward, and Webb computer simulation to suggest that it is easier to sail into Polynesia from the east than the west, but anyone who reads this volume carefully, particularly with respect to the results for drift versus intentionally sailed voyages, will realize that this generalization is not strictly true. Furthermore, Heyerdahl quickly reveals that he is unaware of, or unwilling to use, the voluminous data pertaining to the Polynesians from the past twenty-five years of research in linguistics and archaeology. A quick scan of the bibliography will reveal this immediately.

In the third chapter, Heyerdahl goes on to polarize the isolationists and diffusionists, to berate the former, to ask why American civilizations start at the top and then decline, and generally to put the Olmecs and Tiahuanaco on a pedestal as foci of Mediterranean influences (surely he knows that the Tiahuanaco monuments are a millennium younger than those at La Venta?) In Chapter 4, he relates these influences to the "bearded white gods" of American traditions--Viracocha, Quetzalcoatl and so forth--and in Chapter 6, he has them sweeping on with their followers into Polynesia, in a manner unchanged from that reconstructed in his 1952 magnum opus, American Indians in the Pacific. The same rather antiquated sources are requoted, the true Polynesians continue to sail into Polynesia from British Columbia around the fourteenth century, and Heyerdahl reveals his ignorance, or disdain, of modern sources by making some startling factual mistakes, in a volume which is quite liberally peppered with such lapses. For instance, on page 179, he quotes Fornander on the cessation of pyramidal stone platform construction in Polynesia some thirty generations ago (the largest was actually built in 1767), he then says feather headdresses were unknown in Southeast Asia (they were depicted frequently on Dong-Son drums), and then claims that Southeast

Asian pottery was always made on a wheel. These statements are totally erroneous, and the book has many more in the same vein.

In Chapters 7 and 9, Heyerdahl claims that the Incas told the Spaniards about the existence of the Polynesian islands, and he discusses the numerous plants of American origin which grew prehistorically in Polynesia. Much scope for long argument here, but I will merely state that I would be the last person to claim that no American Indians every reached Polynesia. Indeed, I find the arguments presented in these two chapters quite acceptable, but not the general framework in which Heyerdahl sets them.

In Chapters 12 and 13, Heyerdahl presents his views on Easter Island, as derived mainly from the results of his very competent expedition of 1955. There is little new, and I will only state that I have discussed all this at length elsewhere (*Man's Conquest of the Pacific*, pp. 361 ff.), as has Jack Golson (*Oceania* 36:38-83). The Polynesian-over-Peruvian scenario really doesn't work any more, and many of those long lists of items which Heyerdahl says are common to Easter Island and the Americas, but not found in the Western Pacific, contain lame ducks; for instance, the birdmen, the double-bladed paddles, the stone-lined ovens, the obsidian spearheads, the extended earlobes, and even cremation. I could add more, and even specify the westerly parallels, but space does not permit.

In the final chapter, Heyerdahl seems to get to his main overall synthesis, in between mentions of Atlantis, megaliths, the Canary Islands, and a general odd bag of Mediterranean archaeology. He regards ca. 3,100 B.C. as a kind of "super-date," when upheavals in the Mediterranean sent people off to Mexico, Ecuador, and led to the unification of Egypt and the start of historical civilization in Sumer. A second series of upheavals around 1,200 B.C., naturally much better documented in connection with the eruption of Santorini, sent off a second wave of peoples related to the Phoenicians, Hittites and "Sea Peoples" across the Atlantic--hence the Olmecs. Even the remote Morioris of the Chatham Islands are said to have had "Arabic-Semitic countenances." The Spaniards were, in Heyerdahl's view, the last in a long line of Old World colonists when they reached Mexico and Peru.

Perhaps people did drift in prehistoric times along those currents which Heyerdahl sees as so powerful and unchanging. At least he has sailed (or drifted) on them; I haven't. But the modem studies in archaeology and linguistics which Heyerdahl ignores make it so clear that Polynesians *did* sail from west to east out of Melanesia and Indonesia, and that American Indian cultures *did not* suddenly leap forward from hunting and gathering at the dates Heyerdahl suggests. If any Phoenicians ever did

reach Mexico, and it is, of course, very possible that some did, then one could argue that the evolving local cultures simply ignored them, or perhaps merely borrowed the name of a god or carved a representation of Semite on a monument. One has only to look at the varied range of impacts of the past 400 years of European colonization on the cultures of the world to see that "culture bearers," as potent and clearly visible agents for converting savagery to civilization, simply do not exist.

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